Serial No. 10/669,831

1. (currently amended) A compound having the structure

$$I-X-(C=Y)_m-L-A$$

wherein I is an HIV protease inhibitor selected from the group consisting of ritonavir, saguinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl,

Y is O, S or NH,

m is 0 or 1,

L is a linker comprising from 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and containing up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms may be linked in sequence, and

A is an activated functionality chosen from the group consisting of active esters, isocyanates, isothiocyanates, thiols, imidoesters, anhydrides, maleimides, thiolactones, diazonium groups and aldehydes.

- 2. (cancelled)
- (original) The compound of claim 1 wherein X is O, Y is O and m is 1. 3.
- 4. (original) The compound of claim 1 wherein X is NH, Y is O and m is 1.
- 5. (original) The compound of claim 1 wherein X is O, Y is O, m is 1 and the first atom in L adjacent to C=Y is N.
- (original) The compound of claim 1 wherein X is NH, Y is O, m is 1 and the first atom in 6. L adjacent to C=Y is N.

- 7. (original) The compound of claim 1 wherein X is NH, Y is S, m is 1 and the first atom in L adjacent to C=Y is N.
- 8. (original) The compound of claim 1 wherein X is NH, Y is NH and m is 1.
- 9. (original) The compound of claim 1 wherein X is O and m is 0.
- 10-20 (cancelled)
- 21. (currently amended) The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-lopinavir-(6C).
- 22. (currently amended) The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-lopinavir-(6D).
- 23-30 (cancelled)
- 31. (currently amended) A compound having the structure

$$[I-X-(C=Y)_m-L-Z]_n-P$$

wherein I is an HIV protease inhibitor selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl,

Y is O, S, or NH,

m is 0 or 1,

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-,

P is selected from the group consisting of polypeptides, polysaccharides and synthetic polymers, and

n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.

- 32. (cancelled)
- 33. (original) The compound of claim 31 wherein P is an aminated dextran.
- 34. (original) The compound of claim 31 wherein P is bovine serum albumin.
- 35. (original) The compound of claim 31 wherein P is keyhole limpet hemocyanin.
- 36. (original) The compound of claim 31 wherein P is Limulus polyphemus hemocyanin.
- 37. (original) The compound of claim 31 wherein P is bovine thyroglobulin.
- 38-47 (cancelled)
- 48. (currently amended) The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-lopinavir conjugate with KLH-(6F).
- 49. (currently amended) The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-lopinavir conjugate with BSA-(6E).
- 50-51 (cancelled)
- 52. (currently amended) A compound having the structure

$$[I-X-(C=Y)_m-L-Z]_n-Q$$

wherein I is an HIV protease inhibitor selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl,

Y is O, S, or NH,

m is 0 or 1,

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety chosen from the group consisting of -CONH-, -NHCO-,-NHCONH-, -

NHCSNH-, -OCONH-, -NHOCO-, -S-, -NH(C=NH)-, -N=N-, -NH-, and

Q is selected from the group consisting of non-isotopic labels,

and n is a number from 1 to 50 per 50 kilodaltons molecular weight of Q.

- 53. (cancelled)
- 54. (original) The compound of claim 52 wherein Q is biotin.
- 55. (cancelled)
- 56. (currently amended) The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)-terephthaloyl-aminocaproyl]-lopinavir-(6G).
- 57-58 (cancelled)
- 59. (currently amended) An antibody generated in response to a compound having the structure:

$$[I-X-(C=Y)_m-L-Z]_n-P$$

wherein I is an HIV protease inhibitor selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl,

Y is O, S, or NH,

m is 0 or 1,

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-,

P is selected from the group consisting of polypeptides, a polysaccharides, and synthetic polymers,

and n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.

60-65 (cancelled)

66. (original) An antibody generated in response to the compound of claim 48.

67-80 (cancelled)